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# ISD News and Views

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## Term Contract Status

### Microcomputer Term Contract Proposal Evaluation

The Information Services Division continues to evaluate proposals for the microcomputer term contract. The machine configurations that the RFP specified incorporate recent changes in computer technology, in keeping with the industry's rapid growth and change. Both proposals and machines must be evaluated carefully to ensure the best long term value to the State. The time required for this review process has caused a schedule revision, as follows:

Call for Best & Final Offer	February 15
Best & Final Offers Due	March 1
Contract Award	April 1

## Mainframe

### Panvalet Demonstration

ISD has just acquired PANVALET's ISPF OPTION and a new release of PANVALET itself. A representative from Pansophic Systems, Inc., will be here on January 18 to give us a product demonstration. Two half-day sessions have been scheduled in the SRS Auditorium, one from 9 am to 12 noon, and the other from 1 pm to 4 pm. There is no charge for attending this demonstration and everyone is invited.

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## *Using the BILL STATUS System*

The BILL STATUS Information System was described in the December issue of *News & Views*. The system sign-on instructions we published in December had an unnecessary step. The correct instructions follow.

This system is an IDMS application and will run under DCPROD on the State mainframe computer. To sign on to the BILL STATUS System:

Step 1--From the *State of Montana Map*, type DCPROD and press the ENTER key

OR

From the *Supersession Main Menu*, select Session ID IDMSR005.

Step 2--From the DCPROD sign-on screen:  
Name is your ISD User ID.  
Password is your mainframe logon password.  
Press TAB.  
Account number is your five-digit ISD billing number.  
Press ENTER.

Step 3--From *V5 Enter Next Task Code*, type LEG1 and press ENTER.  
You are now in BILL STATUS.

To Exit the BILL STATUS System:

Type OFF and press ENTER.

The full information options will be available as bills are introduced during the session. The complete BILL STATUS User Guide is available from the ISD Help Desk.

## *Update--Mainframe Sessions and Times Out*

In our December issue, *News & Views* reported that if a CICS session was left idle for 30 minutes the system would automatically time the user out (log the user off of the system). Some clarification of that statement is necessary.

ISD's intent is to logoff an idle CICS session after 30 minutes, but there is currently no way to do this. If automatic termination of CICS sessions becomes possible, the 30 minute idle time logoff will be implemented. In the meantime, an idle CICS session will remain logged on. If the session was invoked via CL/SUPERSESSION, it will remain logged on until the entire CL/SUPERSESSION session is timed out after three (3) hours of inactivity.

## *Lock Before Leaving*

The December *News & Views* suggested that you "lock" your screen before leaving it unattended. This process is described below in case you are unfamiliar with it. Locking your screen is only necessary--and possible--if your terminal or PC is currently logged on to the State mainframe via CL/SUPERSESSION. To lock your screen, use the following procedure:

Step 1--From the *Supersession Main Menu*, type LOCK or lock and press ENTER. "Lock" may be abbreviated to the upper or lower case letters LO or lo.

OR

From any other mainframe system screen, type lock and press ENTER. You may abbreviate to M, but you must use the lower case letter(s).

The lock screen will display with the message, "Enter password to unlock..."

Step 2--Type your mainframe logon password and press ENTER to return to the session or menu from which you locked the screen.

If you are using a PC application with terminal emulation active, you must "hot key" to the mainframe "side" to lock your screen.

## *Logoff or Let the Session Idle?*

Our December issue also suggested that users logoff their mainframe sessions when they are finished using them. We made this request to free up resources for active users.

*(Continued on Page 3, Column 2)*

#### *Update--Mainframe Sessions (Continued from Page 2)*

Logging off is a good practice but only if you have truly finished your sessions. ISD's intent is not to have you spend your time logging on and off. We recently increased the TSO idle time out from 10 to 30 minutes to prevent this inconvenience and unnecessary use of system resources. (More resources can actually be consumed logging off and on than letting your session sit idle if you are going to be using it again within a short period of time.)

Our requests are intended to protect your sessions from unauthorized use and avoid spending unnecessary resources. Thus, if you are using SUPERSESSION, please lock your screen when you will be returning to it shortly. Please terminate your session when you will not be using it again soon, such as when you go to lunch.

## *Microcomputer*

### *WordPerfect's Maintenance Releases*

WordPerfect Corporation has provided the following maintenance releases:

<u>Version</u>	<u>Release Date</u>	<u>Correction or Enhancement</u>
WP 5.0	9/21/90	New printer definitions
WP 5.1	8/20/90	Display pitch, macros & merges, file import
WP 5.1	9/26/90	PTR program--HP LaserJet Bitstream font
WP 5.1	11/9/90	Printer drivers

The WordPerfect 5.0 release of September 21 updates the printer diskettes. The new printer definitions include HP LaserJet III, HP LaserJet IIID, and Okidata 393+. If you use one of these printers, you may want to upgrade to this release date.

WordPerfect 5.1 has a current release date of August 20, 1990. The enhancements in this release include numerous changes to macros and merges as well as changes in document display and use of spreadsheets. The enhanced system rewrites the screen automatically when the display pitch is changed. This release has several spreadsheet enhancements including importing from and linking to Lotus 1-2-3,

support of Lotus 1-2-3's three dimensional ranges, and the use of Setup to specify a default directory for spreadsheet files.

The WordPerfect 5.1 PTR program dated September 26, 1990, includes support for Bitstream fonts for the HP LaserJet III and IIID printers. Printer drivers for WordPerfect 5.1 have a release date of November 9, 1990. If you need any of these features, you may want to upgrade to one or more of these WordPerfect 5.1 release dates.

To obtain new maintenance release upgrades, contact the ISD Help Desk at 444-2973. You will be asked to bring a set of diskettes to the Help Desk (Room 25 of the Mitchell Building). For the WordPerfect 5.0 printer definitions, you will need one 3.5-inch (3.5") diskette or four 5.25-inch (5.25") diskettes. These will replace printer diskettes 1 through 4. If you would like the WordPerfect 5.0 printer diskette for the HP LaserJet III or IIID, please request printer diskette 27 and provide one extra 3.5" or 5.25" diskette.

For the WordPerfect 5.1 updates, you will need five 3.5" diskettes or twelve 5.25" diskettes. These will include printer diskettes 1 through 4.

If you call ahead, the Help Desk will have the updated WordPerfect diskettes ready for you to pick up in exchange for the ones you bring in.

### *Lotus 1-2-3 Update*

ISD is upgrading from Lotus 1-2-3 release 3.0 to release 3.1, and we recommend that other 3.0 users upgrade to release 3.1. The cost is minimal and the new features and system requirements of the Lotus release 3.1 justify the expense.

ISD is not upgrading from Lotus release 2.2 to 3.1. We recommend that you consider the advantages, limitations and requirements discussed below in making your upgrade decision.

In addition to describing the benefits and requirements for the upgrade to 3.1 from either 3.0 or 2.2, this article gives Lotus's upgrade costs.

*(Continued on Page 4, Column 1)*

### *New Features in Lotus 3.1*

The 3.1 enhancements make visualizing and printing Lotus spreadsheets easier. The principal change is called "What You See is What You Get" (WYSIWYG) spreadsheet publishing. The WYSIWYG publishing feature includes an intuitive, easily used menu system that uses a mouse and icons for cursor movement within or across worksheets. Other new features include:

- The ability to change on-screen fonts and worksheet displays quickly and easily.
- A window for editing and customizing graphs.
- Increased control over printing with  
Preview of worksheets before printing.  
Automatic compress printing without  
setup strings.
- A new printer driver for HP Laser Jet III printers.

Current users of 2.2 who choose to upgrade to release 3.1 will experience new features such as 3-D worksheets, multiple worksheets per file, a hot view graph window and presentation quality printing.

### *Lotus 3.1 System Considerations*

Lotus release 3.1 requires 1MB of RAM, 5MB of disk space, and DOS 3.0 or higher. For current users of release 3.0, these requirements have no impact. However, they are a major consideration in upgrading from 2.2 to 3.1. Users of release 2.2 may need to consider not only the expense associated with upgrading the Lotus software, but also the cost of a RAM and DOS software upgrade.

A second consideration is the number of applications shared by those using previous releases of Lotus. Lotus 1-2-3 users who upgrade to 3.1 will find no problem working with files created in 3.0 or 2.2. However, co-workers who do not upgrade may encounter problems when working with files created or re-saved with Lotus 3.1. If you create or modify a file in Lotus 3.1 using new @functions or macro functions, it should only be retrieved by 3.1 users. The data associated with those new functions may be lost if the spreadsheet is retrieved by a Lotus 3.0 user or saved with a 2.2 extension (WK1).

If you are a current user of Lotus 2.2 and considering an upgrade to release 3.1, you should weigh the above factors carefully. If the release's new features are of sufficient value, current 2.2 users can upgrade to 3.1.

### *Product Support*

Lotus will upgrade Lotus releases 2.2 and 3.0 to Lotus release 3.1, at the following prices:

	<u>Lotus Release</u>	
	<u>3.0 to 3.1</u>	<u>2.2 to 3.1</u>
Network Server		
Edition	\$35.00	\$75.00
Network Nodes	\$35.00/node	\$75.00/node
Standalone PC	\$35.00/PC	\$75.00/PC

End User Computing Services is upgrading to and supporting Lotus 3.1 and will be offering formal training on this new release beginning May 1, 1991. We will continue to provide training and support for Lotus 2.2. If you have any questions about Lotus, please call Randy Pugh at 444-2907.

### *R:Base 3.1--Upgrade If You Like*

In December's *News and Views*, we recommended upgrading to R:Base for DOS, release 3.1. Some agencies have completed the R:Base upgrade, and ISD is providing technical support for them. However, the upgrade is not mandatory, nor is it a requirement for continued ISD support. We will continue to support R:Base for DOS, release 2.11, as long as we have employees with expertise in the product.

Beginning with the "Introduction to R:Base" class on January 30, all R:Base training will be done on release 3.1. If your office is using release 2.11, please be aware that students attending our R:Base classes may have some difficulty adjusting to the differences in your release.

The R:Base 3.1 monitor display (screens) and some input and output options look completely different from R:Base 2.11, but the underlying functions have not changed much. The 3.1 release has pull-down and cascading menus and mouse support. The data entry process can  
(Continued on Page 5, Column 1)

#### *R:Base 3.1 (Continued from Page 4)*

include user-defined edits that are applied as the cursor enters or leaves the data field. Pop-up windows, controlled by a Shift-F3 keystroke, display the valid values for a data field and allow selection and entry of a value. ANSI Level 2 Structured Query Language (SQL) is fully implemented, with some functional extensions that are DB2 compatible. Picture formats-masks-may be used for fields on reports. Printer driver files are provided, making the use of special print styles much simpler. The updated system requires 450K memory, which is less than release 2.11 requires.

You can convert R:Base 2.11 applications to release 3.1, but may need ISD assistance if you used any of 3.1's reserved words in your application. You can not use the R:Base compiler with the new release. If you need assistance in either of these areas, or if you have other questions about the new release, contact Jeff Holm at 444-2072.

The cost of the upgrade is \$195 for a single user package (required), and \$250 for a 5-user LAN pack. Upgrade orders should be directed to the attention of Doug Buck at Microrim (whether mailed or faxed). His direct phone number is (206) 649-2728. Orders may be faxed to (206) 649-2792. If you fax an order, be sure to include your product registration number, specify the disk size you wish to receive, and include a copy of your purchase order.

## *Commentary*

*News & Views* is planning a face-lift--not to say architectural redesign--to provide you better, more timely information. Throughout the reconstruction process, we do and will solicit your ideas, requests, and other verbal, printed or electronic input. We invite you to submit

articles for publication, as well as ideas, although we cannot promise to publish the flood of article(s) we expect to receive.

To stimulate that flood, we provide herewith our publication schedule for the next three months:

<u>Activity</u>	<u>Deadline</u>
<b>February Issue</b>	
Submission of articles to ed.	Fri., 1/18
Management review of <i>N&amp;V</i>	Fri., 1/25
<i>N&amp;V</i> to printer	Tues., 1/29
<i>N&amp;V</i> to readers	Mon., 2/4
<b>March Issue</b>	
Submission of articles to ed.	Fri., 2/15
Management review of <i>N&amp;V</i>	Fri., 2/22
<i>N&amp;V</i> to printer	Tues., 2/26
<i>N&amp;V</i> to readers	Mon., 3/4
<b>April Issue</b>	
Submission of articles to ed.	Fri., 3/15
Management review of <i>N&amp;V</i>	Fri., 3/22
<i>N&amp;V</i> to printer	Tues., 3/26
<i>N&amp;V</i> to readers	Mon., 4/1

If you have valuable input but are unable to meet the above schedule or if you have any questions about *News & Views'* publication, please call Sherry Hanks at 444-2700.

## *Training*

### *Class Registration*

ISD offers several classes that are very popular with state employees. To ensure your participation in a class, you may call 444-2973 to pre-register. Completed enrollment forms must also be sent to the ISD Help Desk. Participants will receive a letter confirming their attendance in a class about 1 1/2 weeks in advance.

# Training Information

All classes will be held in the basement of the Teachers Retirement Building at 1500 6th Ave, unless another location is specified. There is a limit of 12 participants per paid class and 20 participants per demonstration class, unless otherwise announced.

The cost of the classes is as follows:

<u>Class Name</u>	<u>Subscriber</u>	<u>Non-Subscriber</u>	<u>Length in Days</u>
Introduction to TSO/SPF	\$ 50.00	\$ 50.00	1
Personal Services/PC	30.00	30.00	½
Personal Manager (PM)	30.00	30.00	½
*Introduction to JCL	200.00	200.00	4
*Introduction to Culprit	150.00	150.00	3
*Culprit Programming for IDMS	100.00	100.00	2
*Using COMPAREX	30.00	30.00	½
*Using Novell Network	30.00	40.00	½
Introduction to SAS: Module 1	25.00	25.00	¼
Module 2	25.00	25.00	¼
Module 3	125.00	125.00	2½
Module 4	25.00	25.00	½
Module 5	25.00	25.00	½
Beginning Microcomputer Skills	50.00	70.00	1
Fundamentals of DOS	50.00	70.00	1
Intermediate DOS	50.00	70.00	1
*Conversion from WordPerfect 4.2 to 5.0	30.00	40.00	½
Conversion from WordPerfect 5.0 to 5.1	30.00	40.00	½
Introduction to WordPerfect (5.0 or 5.1)	75.00	105.00	1½
Advanced WordPerfect (5.0 or 5.1)	75.00	105.00	1½
Conversion from Lotus 2.01 to 2.2	30.00	40.00	½
*Conversion from Lotus 2.01 to 3.0	30.00	40.00	½
Conversion from Lotus 2.2 to 3.0	30.00	40.00	½
Introduction to Lotus 1-2-3 (Rel. 2.2 or 3.0)	100.00	140.00	2
Advanced Lotus 1-2-3 (Rel. 2.2 or 3.0)	100.00	140.00	2
Spreadsheet Design and Documentation	50.00	70.00	1
*Lotus 1-2-3 Macros	100.00	140.00	2
*Introduction to Lotus 1-2-3 Databases	100.00	140.00	2
Micro Database Concepts and Design	50.00	70.00	1
Conversion from R:Base 2.11 to 3.1--Demonstration	FREE	FREE	¼
Introduction to R:Base (Rel. 3.1)	125.00	175.00	2½
Intermediate R:Base (Rel. 3.1)	100.00	140.00	2
Introduction to PFS:Professional File	50.00	70.00	1
*Freelance	50.00	70.00	1
State Telephone Training	FREE	FREE	¼

\* This class is not scheduled during the time covered in this issue.

# Training Calendar

## Data Network/Mainframe Classes

Jan 7-10	Introduction to SAS
Jan 14 pm	Personal Services/PC
Jan 17 pm	Personal Manager (PM)
Mar 13	Introduction to TSO/SPF

## Microcomputer Classes

Jan 15	Beginning Microcomputer Skills
Jan 28	Fundamentals of DOS
Feb 11	Beginning Microcomputer Skills
Feb 19	Intermediate DOS
Mar 7	Fundamentals of DOS
Mar 21	Beginning Microcomputer Skills

## Word Processing Classes

Jan 16 & am Jan 17	Introduction to WordPerfect 5.1
Jan 21 & am Jan 22	Advanced WordPerfect 5.1
Jan 22 pm	Conversion from WordPerfect 5.0 to 5.1
Feb 4 & am Feb 5	Introduction to WordPerfect 5.0
Feb 12 & am Feb 13	Introduction to WordPerfect 5.1
Feb 21 & am Feb 22	Advanced WordPerfect 5.0
Mar 5 & am Mar 6	Introduction to WordPerfect 5.0
Mar 14 & 15	Introduction to WordPerfect 5.1

## Spreadsheet Classes

Jan 14 am	Conversion from Lotus 1-2-3 Release 2.01 to 2.2
Jan 23 & 24	Introduction to Lotus 1-2-3, Rel. 2.2
Feb 5 pm	Conversion from Lotus 1-2-3 Release 2.2 to 3.0
Feb 14 & 15	Introduction to Lotus 1-2-3, Rel. 3.0
Feb 25 & 26	Introduction to Lotus 1-2-3, Rel. 2.2
Mar 8	Spreadsheet Design and Documentation
Mar 11 & 12	Introduction to Lotus 1-2-3, Rel. 2.2
Mar 18 & 19	Advanced Lotus 1-2-3, Rel. 2.2

## Database Classes

Jan 7-10	Introduction to SAS
Jan 29	Micro Database Concepts and Design
Jan 30-31 & am Feb 1	Introduction to R:Base
Feb 1 pm	Conversion from R:Base 2.11 to 3.1--Demonstration
Feb 7	Introduction to PFS:Professional File
Mar 26 & 27	Intermediate R:Base

## Communication Classes

Feb 6 am	State Telephone Training
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## *Data Network Classes*

**INTRODUCTION TO TSO/SPF:** presented by Jeff Holm of the Application Services Bureau

**DATE:** March 13, 1991  
**TIME:** 8:30 am to 4:00 pm  
**PREREQUISITE:** 3270nd (interactive class on terminal operation)  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

INTRODUCTION TO TSO/SPF is a hands-on workshop about using computer terminals (or PC terminal emulators) and the SPF editor. SPF is an easy-to-learn menu system used to enter data and programs into the State of Montana central computer. Entering data, changing data and submitting programs (jobs) for execution are covered in detail. Also covered are SPF's utility functions and the tracking of job output.

This course is essential for state government personnel using terminals or PCs linked to the State's central computer. This course is a prerequisite for many other ISD classes.

**USING PERSONAL SERVICES/PC (PS/PC):** presented by Irvin Vavruska of the Application Services Bureau

**DATE:** January 14, 1991  
**TIME:** 1:00 to 4:30 pm  
**PREREQUISITE:** Beginning Microcomputer Skills and experience with either WordPerfect or Displaywrite3  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

PS/PC allows you to send and receive messages or files electronically. A document generated in either WordPerfect or Displaywrite3 can be distributed, through DISOSS on the State's mainframe, to any other person who is also using PS/PC. The course teaches the use of PS/PC to transmit messages and documents.

To use PS/PC you must have the Personal Services/PC software, the IBM PC 3270 Emulation Program and adapter, and coaxial cable or modem-telephone-line linkage from your PC to the State's mainframe.



**PERSONAL MANAGER (PM):** presented by Irvin Vavruska of the Application Services Bureau

**DATE:** January 17, 1991

**TIME:** 1:00 to 4:30 pm

**PREREQUISITE:** Beginning Microcomputer Skills or Basic Terminal Skills

**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

Personal Manager is a calendaring product available through the State's mainframe. It is used for scheduling meetings (for yourself and others), identifying vacations and days off, reserving resources such as conference rooms, and picking up or leaving telephone messages.

To use PM you must have a terminal--or a PC with a terminal emulation program and adapter--linked to the State's mainframe.

### *Microcomputer Classes*

**BEGINNING MICROCOMPUTER SKILLS:** presented by the staff of The Computer School

**DATES:** January 15, 1991, or

February 11, 1991, or

March 21, 1991

**TIME:** 8:15 am to 4:30 pm

**PREREQUISITE:** None

**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This course will give participants brief hands-on experience with microcomputers. The following topics will be covered:

- The machine
- The operating system
- Word processing
- Spreadsheets and graphics
- File Management
- Communications

All class time will be spent using microcomputers and software. This course helps develop a positive attitude toward using microcomputers and teaches their basic functions. It--or its equivalent--is a prerequisite for other microcomputer courses.

**FUNDAMENTALS OF DOS:** presented by the staff of The Computer School

**DATE:** January 28, 1991, or  
March 7, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Beginning Micro Skills and/or 3 months micro experience  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

FUNDAMENTALS OF DOS is intended for microcomputer users who need to know more about controlling the microcomputer through its operating system. Programming experience is NOT required. Topics to be covered include:

- What is DOS? Why is it necessary to know about it?
- DOS names for peripherals
- File naming
- Set-up files such as CONFIG.SYS
- Internal DOS commands - DIR, ERASE, RENAME, TYPE, COPY and their variations
- External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
- Interpreting batch files
- Backup procedures

**INTERMEDIATE DOS:** presented by the staff of The Computer School

**DATE:** February 19, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Fundamentals of DOS or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed to follow the "Fundamentals of DOS" class and to give the user a better understanding of and increased ability to use DOS. It is not designed for programmers and does not cover all the advanced features of the operating system. The following topics are covered:

- |                        |           |
|------------------------|-----------|
| • ATTRIB               | • JOIN    |
| • Batch File Creation  | • LABEL   |
| • EDLIN                | • MODE    |
| • Batch file commands  | • REPLACE |
| • DISKCOMP             | • SELECT  |
| • Filters (FIND, MORE) | • XCOPY   |

## Word Processing Classes

**INTRODUCTION TO WORDPERFECT 5.0:** presented by the staff of the Application Services Bureau or The Computer School

**DATE:** February 4 and 5, 1991, or  
March 5 and 6, 1991

**TIME:** 8:30 am to 3:30 pm on first day  
8:30 am to noon on second day

**PREREQUISITE:** Beginning Microcomputer Skills or equivalent

**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for beginning users of WordPerfect 5.0. Experience with WordPerfect 4.2 is not necessary. The class will take the participants through the fundamentals of creating, printing, and editing documents. The new Setup feature will be discussed. Formatting documents as they are created and after creation will be covered. Some of the time saving features such as spell check, merges, block functions and macros will also be covered.

**ADVANCED FEATURES OF WORDPERFECT 5.0:** presented by staff of the Application Services Bureau or The Computer School

**DATE:** February 21 and 22, 1991

**TIME:** 8:30 am to 3:30 pm on first day  
8:30 am to noon on second day

**PREREQUISITE:** Introduction to WordPerfect 5.0 or equivalent

**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

For those already using WordPerfect 5.0, the advanced class will cover footnotes, column generation, sorting capabilities, dual document editing, changing fonts within a document, creating style sheets and master documents, keyboard layout, compose and graphics.

**CONVERSION OF WORDPERFECT 5.0 TO 5.1:** presented by the staff of the  
Application Services Bureau

**DATE:** January 22, 1991  
**TIME:** 1:00 to 4:30 pm  
**PREREQUISITE:** Introduction to WordPerfect or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for those people with previous experience in WordPerfect 5.0 who are upgrading to WordPerfect 5.1. The class offers hands-on experimentation with the new and changed features implemented in version 5.1.

**INTRODUCTION TO WORDPERFECT 5.1:** presented by the staff of the Applica-  
tion Services Bureau or The Computer  
School

**DATE:** January 16 and 17, 1991, or  
February 12 and 13, 1991, or  
March 14 and 15, 1991  
**TIME:** 8:30 am to 3:30 pm on first day  
8:30 am to noon on second day  
**PREREQUISITE:** Beginning Microcomputer Skills or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for those users new to WordPerfect. This class will lead participants through the basics--creating, editing and printing documents. Some advanced features--formatting, spell check, block functions and others--will also be covered.

**ADVANCED FEATURES OF WORDPERFECT 5.1:** presented by the staff of the  
Application Services Bureau or  
The Computer School

**DATE:** January 21 and 22, 1991  
**TIME:** 8:30 am to 3:30 pm on first day  
8:30 am to noon on second day  
**PREREQUISITE:** Introduction to WordPerfect 5.1  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is geared for those who are proficient in the basics of WordPerfect 5.1. Topics include footnotes, text columns, sorting, style sheets, master documents, key-board layout, graphics, table formats, advanced merging and generation of labels.

## *Spreadsheet Classes*

**INTRODUCTION TO LOTUS 1-2-3 RELEASE 2.2:** presented by the staff of the Application Services Bureau or The Computer School

**DATE:** January 23 and 24, 1991, or  
February 25 and 26, 1991, or  
March 11 and 12, 1991  
**TIME:** 8:30 am to 4:30 pm each day  
**PREREQUISITE:** Beginning Microcomputer Skills or equivalent  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for persons with little or no Lotus 1-2-3 experience. It will consist of instructions and hands-on practice, with lab time available for building spreadsheets of the participants' choosing.

The class will concentrate on using 1-2-3 Release 2.2 to design, create, edit and print spreadsheets and to create graphics. Some intermediate features such as the Allways Add-In product will be used to teach enhanced printing spreadsheets and graphs.

**CONVERSION FROM LOTUS 2.01 TO 2.2:** presented by the staff of the Application Services Bureau

**DATE:** January 14, 1991  
**TIME:** 8:30 pm to noon  
**PREREQUISITE:** Introduction to Lotus 1-2-3 Rel. 2.01  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for anyone upgrading from 2.01 to 2.2. It consists of demonstrations and hands-on practice.

The emphasis will be on such new features of 2.2 worksheets as:

- Referencing of data from separate worksheet files.
- UNDO feature.
- Search/replacement of formulae or data.
- Setting or resetting of width of a range of columns.
- Automatic creation of backup files.
- New "settings sheets," screens that display defaults or settings you select for worksheet and global defaults, printing, graphing, and various database settings.

*(Continued on Page 14)*

Also covered will be graphic enhancements such as:

- Legends wrapping to 2 or more lines
- Staggering X axis labels
- Grouping data (Quick Graph, Multiple graph legends and data labels)
- Spreadsheet printing using the new Allways Add-In package

**INTRODUCTION TO LOTUS 1-2-3 RELEASE 3.0:** presented by the staff of the Applications Services Bureau

**DATE:** February 14 and 15, 1991  
**TIME:** 8:30 am to 4:30 pm each day  
**PREREQUISITE:** Beginning Microcomputer Skills  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed for persons with little or no Lotus 1-2-3 experience. It will consist of instructions and hands-on practice, with lab time available for building spreadsheets of the participants' choosing.

The class will cover design, creation, printing and editing of 3-dimensional spreadsheets. Additional topics will include selected graphic features, the use of formulae to connect spreadsheets, multiple spreadsheets within a single file, and the opening of multiple files at the same time.

**CONVERSION FROM LOTUS 2.2 TO 3.0:** presented by the staff of the Applications Services Bureau

**DATE:** February 5, 1991  
**TIME:** 1:00 to 4:30 pm  
**PREREQUISITE:** Introduction to Lotus 1-2-3 Release 2.2

This course is designed for anyone upgrading from 2.2 to 3.0. It consists of demonstrations and hands-on practice.

The emphasis will be on the new features of 3.0. Some of these features include:

- Creating 3-dimensional spreadsheets (up to 256 2-dimensional spreadsheets in same file).
- Connecting spreadsheets with formulae.
- Using multiple files (up to 256 spreadsheets) at the same time.
- Window graphing.
- Printing graphs directly from a spreadsheet.

**SPREADSHEET DESIGN AND DOCUMENTATION:** presented by Randy Pugh of  
the Application Services  
Bureau

**DATE:** March 8, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class will emphasize the importance, effectiveness and the organizational benefits of good spreadsheet design and documentation. Lotus 1-2-3 Release 2.2 will be used to demonstrate good and bad techniques. Some methods to locate some of the more common mistakes and logic problems will be covered.

**ADVANCED FEATURES OF LOTUS 1-2-3, VERSION 2.2:** presented by The  
Computer School

**DATE:** March 18 and 19, 1991  
**TIME:** 8:30 am to 4:30 pm each day  
**PREREQUISITE:** Introduction to Lotus 1-2-3  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This course is designed for anyone who is using Lotus 1-2-3 to create spreadsheets for all but the simplest applications. Advanced features include:

- File linking and multiple worksheet consolidation
- The @ functions
- Use of dates and times within 1-2-3
- Hiding and/or protection of spreadsheet ranges
- Advanced global settings
- Setting sheets and improved graph appearance

The class will also cover demonstrations of Lotus 1-2-3's database and Macro functions and many other features not included in Introduction to Lotus 1-2-3.

The class consists of lecture, hands-on practice, lab work and a question and answer period.

## Database Classes

**MICRO DATABASE CONCEPTS AND DESIGN:** presented by Jeff Holm of the Application Services Bureau

**DATE:** January 29, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Beginning Microcomputer Skills  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed to give participants a primary understanding of what a relational database is and how it compares to other products like Lotus 1-2-3 and PFS:Professional File. The class teaches database design techniques and is a prerequisite for other database classes offered by ISD.

**INTRODUCTION TO R:BASE 3.1:** presented by Jeff Holm of the Application Services Bureau

**DATE:** January 30 and 31 and February 1, 1991  
**TIME:** 8:30 am to 4:30 pm on first and second days  
8:30 am to noon on third day  
**PREREQUISITE:** Micro Database Concepts and Design  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class will give participants hands-on experience creating a database and developing a simple application with R:Base 3.1. The application will include database updates, queries, and simple form and report generation. The R:Base menu system will be used to develop the application. This class will not cover the R:Base command mode or programming other than menu system application development.



**CONVERSION FROM R:BASE 2.11 TO 3.1:** presented by Jeff Holm of the  
Application Services Bureau

**DATE:** February 1, 1991  
**TIME:** 1:00 to 3:00 pm  
**PREREQUISITE:** Some knowledge of R:Base

This free demonstration (mini-course) covers converting your R:Base for DOS 2.11 databases and application programs to the R:Base release 3.1 format. Many of the new features of release 3.1 will be demonstrated, and many of the differences between the two releases will be discussed.

**INTRODUCTION TO PFS:PROFESSIONAL FILE, VERSION 2.0:** presented by  
Randy Pugh of the Application Services  
Bureau

**DATE:** February 7, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Beginning Microcomputer Skills  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

The PFS:Professional File software is an easy to use file management system. This course will give the participant hands-on experience creating databases, demonstrating the flexibility of this software in storing, retrieving, and updating a large amount of related information.

**INTERMEDIATE R:BASE:** presented by Jeff Holm of the Application Services  
Bureau

**DATE:** March 26 and 27, 1991  
**TIME:** 8:30 am to 4:30 pm  
**PREREQUISITE:** Introduction to R:Base  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class will expand on topics covered in "Introduction to R:Base." Topics will include sophisticated forms and reports, multi-table operations, database maintenance, and R:base commands and functions. An overview of custom code and macros will be given to demonstrate the programming capabilities of R:Base, but emphasis will be on enhancements to Application Express rather than "programming from scratch."

## *Communication and Network Classes*

**TELEPHONE STATION USER TRAINING:** presented by Nancy Lonz of the  
Telecommunications Bureau

**DATE:** February 6, 1991  
**TIME:** 8:30 to 10:30 am  
**PREREQUISITE:** None  
**LOCATION:** Basement of the Teachers Retirement Bldg at 1500 6th Ave.

This class is designed as an introductory or refresher course to familiarize employees with the features and use of the State telephone system. Also discussed will be the different calling capabilities available and the dialing plan. This is an interactive class combining demonstrations and hands-on use of the features and the dialing plan.

*ISD CLASS ENROLLMENT APPLICATION*  
*COMPLETE THIS APPLICATION IN FULL AND*  
*RETURN IT TO THE INFORMATION SERVICES "HELP DESK"*  
*PRIOR TO THE FIRST DAY OF CLASS*

COURSE DATA

Course Requested: \_\_\_\_\_

Date Offered: \_\_\_\_\_

STUDENT DATA

Name: \_\_\_\_\_

Soc Sec Nbr (for P/P/P): \_\_\_\_\_

Agency & Division: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone: \_\_\_\_\_

How have you met the required prerequisites for this course? Explain giving the class(es) taken, tutorial(s) completed, and/or experience.

\_\_\_\_\_  
\_\_\_\_\_

BILLING INFORMATION/AUTHORIZATION

Are you an ISD subscribing agency: \_\_\_\_\_

ISD Billing Number (5 digits): \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE THREE BUSINESS DAYS BEFORE THE DATE FOR EACH CLASS.

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